# **HEALTHCARE**

## CASE STUDY www.progress.com



Globally, organizations that help to deliver healthcare, whether government or privatesector, are challenged by the need to accommodate ever more complex deliverables while controlling costs. For many, Progress' Corticon' Business Rules Management System (BRMS) has become a key enabling technology to support greater efficiency through agility, in particular by allowing business rules to be adapted as requirements and regulations change due to market conditions.

# CHALLENGE: HEALTHCARE ORGANIZATIONS STRUGGLE TO DO MORE WITH LIMITED RESOURCES AND TIGHT BUDGETS

Around the globe, healthcare has become a high-stakes sector for innovation. Caught between growing demands for quality medical services from aging populations and push-back from the public and private payer communities, healthcare organizations have had to seek better ways to measure, manage and improve processes.

As one CEO noted, "We believe the healthcare sector will face a major shift in the coming years, adopting new business models and technologies to adjust to the modern world. People will open their minds and embrace technology as part of the solution to this global healthcare crisis."

For example, the European Practice Assessment initiative for quality management in primary healthcare, is working to provide a set of indicators for general practitioners to apply. The goal is to compare and improve the delivery of medical services across the continent.

In another example of the changing currents in United Kingdom healthcare, the Health Sciences group of the University of Manchester brings Manchester's primary care researchers, together with experts in health research methodology (economics, statistics, and informatics) and health psychology, to improve healthcare policy and practice. This is a model for the kind of collaboration that is spreading across the globe.

For a healthcare provider that delivers services in both North America and the Asia Pacific region, it is crucial that the organization can quickly access a patient's medical history and critical pieces of information like prescribed medications and dosages, regardless of that patient's location. "When we set up our offices and our technology platform, we purposely structured it so that we could leverage all of our information across locations— anytime, anywhere," noted the President and CEO.

Progress Corticon Business Rules Management System (BRMS) meets these various challenges by helping increase the agility of decision-change processes, and enables new insights into the connections between individual recurring decisions and business

#### CHALLENGE

To build and strengthen the delivery of healthcare products and services in a diverse global market by incorporating rules and processes within an automated BRMS

### SOLUTION

To deliver competitive and efficient healthcare offerings, public and private entities have turned to Progress Corticon to capture process logic and make it available for analysis and improvement and to rapidly implement changes when needed

#### BENEFIT

Corticon has dramatically helped healthcare organizations streamline decision-making and operationalize process improvements with more confidence and agility – and greater speed. Furthermore, because Corticon makes it simple to update, customers find it easy to make changes when needed

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performance. Because Corticon separates decisions from processes, it helps both healthcare business and IT users quickly create or reuse business rules as well as create, improve, collaborate on and maintain decision logic.

Healthcare customers around the world have realized significant bottom- and top-line results using Corticon to improve decision automation and decision change processes, while also improving decision-related insights.

## SOLUTION: APPLY CORTICON AND ACHIEVE FLEXIBILITY AND AGILITY

How is it possible to make healthcare more affordable, extend its reach and improve quality all at the same time? One organization with a global vision chose Progress Corticon to help provide an answer. It saw that healthcare providers want their patients to take advantage of every opportunity to improve their health, while payers are anxious to reduce healthcare utilization and costs.

At the core of their solution was a focus on prevention, which aims to tackle this global health care challenge head-on, bringing benefits to all parties. The system depends on Progress Corticon BRMS to deliver critical automated business decisions and increase the agility of decision-change processes. The system molds complex rules without source code, and because it has a simple interface that allows non-IT users to quickly and easily create or change rules, the solution is highly scalable.

"Progress Corticon was the best solution to meet our needs," explained the company CEO. "It has significantly reduced our time-to-market because we can now develop and deploy a new rule in 10 minutes versus six hours," he said. Progress Corticon easily supported large amounts of dynamic data. It offered the flexibility and agility the company needed around rules creation and management. "We expect it will reduce our development and maintenance cycle by 90%. There are no other solutions on the market that can do for us do what Progress Corticon does," he added.

But the decision to choose Progress Corticon went beyond just technology benefits. The company also recognized the value and benefits of working with a large, international organization with a strong partner program and extended partner ecosystem.

As another example, one government sought to streamline benefits eligibility determination by applying consistent logic across multiple legacy systems that contained their own data and logic, leading to more consistent results and reduced expenditures. Even something as fundamental as determining an applicant's eligibility based on income level turned out to be problematic.

Included as part of a broader IT modernization effort, Progress Corticon proved to be the key to establishing and enforcing rules that cross systems to ensure the specific goals of each health benefit program are met in an efficient and accurate manner. Furthermore, even when rules changed, Corticon made it possible to immediately implement those adjustments system-wide. What used to take months now takes days because of the implementation of Corticon.

Corticon also plays a role beyond simply enhancing existing functions. One vendor of healthcare support systems implemented Corticon as an essential element in its offering. This leading pharmacy benefit manager company selected Corticon to develop software central to its new clinical platform, which includes modules that help physicians and health plans identify opportunities for better management of pharmacy utilization, as well as identifying gaps in care, safety and costs. Effective management of those issues yielded improved patient outcomes and reduced overall healthcare costs.

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Healthcare CEO and Progress Corticon Customer

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The Corticon rules engine combines and analyzes data based on clinical algorithms for effective identification of drug-therapy opportunities and helps the company quickly determine actionable information, to consistently make the best decisions. "Smart use of medical and pharmacy data is one of the most powerful tools we have to improve outcomes and increase value for our members and clients," explained the company's Chief Clinical Officer.

Above all, Corticon is a forward-looking technology. One company, focused on personalized medicine, recently selected Corticon to drive better, faster business decisions by automating the complexity of the scientific rules associated with personalizing individual patient offerings. And the company plans to scale its number of users by 357%, within just a couple of months.

Today, the company can look forward to implementing Corticon to fulfill the promise of personalized medicine by tailoring therapeutic plans to each patient's particular circumstances. This improves health outcomes for patients and saves money by replacing expensive and error-prone manual methods with decision-making capabilities embedded and maintained in Corticon.

Similarly, as part of the Medicare reforms in the U.S., the federal government stipulated that if a hospital causes a problem/complication during a treatment, the government is only responsible for paying for the original problem and that the hospital must cover the cost for the treatment of the complication. Thus, hospitals quickly became more cognizant of the financial impacts of this issue.

To address this issue, a university hospital system installed a monitoring system that constantly recorded and assessed all patient vital signs and test results. Corticon provided the rules management that proactively detected any signs of potential complications and reduced their costs associated with re-admission.

And the Corticon impact on healthcare does not stop there. The following is a list of some of the ways Corticon has been applied to improve healthcare:

- Benefit Plan Review
- Dementia Assessment
- Diabetes Risk Assessment
- Glasgow Coma Scale
- Head Injury Triage
- Healthcare Questionnaire Scoring
- Hypertension Risk Assessment
- ICD9 Diagnosis Codes
- Immunization Schedules
- Medical Order Fulfillment
- Prescription Renewal
- Medical Claim Processing
- At-Risk Population Monitoring

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Healthcare Chief Clinical Officer



## **SUMMARY**

Corticon enables organizations in the healthcare sector to make better, faster decisions by automating business rules. With its patented "no-coding" rules engine, Corticon is used by hundreds of customers to automate their most sophisticated decision processes, reducing development and change cycles by 90%.

Automated decision management with Corticon empowers organizations to improve productivity and customer service, and adapt quickly to changing market conditions.

#### **PROGRESS SOFTWARE**

Progress Software Corporation (NASDAQ: PRGS) is a global software company that simplifies the development, deployment and management of business applications onpremise or in the cloud, on any platform or device, to any data source, with enhanced performance, minimal IT complexity and low total cost of ownership.

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